

Chapter 16

Artificial Intelligence in Marketing: A Review of Consumer–AI Interactions

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ABSTRACT

The purpose of this chapter is to shed light on the consumer-AI interaction in the marketplace. By this aim, the chapter uses a literature review approach. The previous literature examining AI from a consumer behavior perspective is reviewed, and the findings are compiled in a meaningful flow. According to the review, we see that the traditional marketplace is shaped by AI from only human-to-human interactions to human-to-AI and AI-to-AI interactions. In this new marketplace, while consumers interact with AI, they gain new experiences and feel positive or negative because of these experiences. Also, they build different relationships with AI, such as servant, master, or partner. Besides these relationships, there are still concerns about AI that are related to privacy, algorithmic biases, consumer vulnerability, unemployment, and ethical decision making.

INTRODUCTION

The artificial intelligence (AI) concept was born in the mid-twentieth century (Feng et al., 2020) and can be defined as the “computational agents that act intelligently” (Poole & Mackworth, 2010, p. 3). Human intelligence is imitated by machines in AI. Thus, AI can complete the tasks such as visual perception, speech recognition, and decision-making under uncertainty that normally requires human intelligence (Gillath, et al., 2021; Rossi, 2018; Russell & Norvig, 2016).

Today AI is used by companies and it is in the life of consumers. For example, consumers can talk to a chatbot when they call a company or interact with the robot employees working at hotel receptions when making a hotel reservation. Product recommendations in online shopping are made by an AI system even if the consumer is not aware of. Besides, there are smart home appliances such as smart refrigerators in today's homes that can talk to each other to find out what is needed at home and make the orders

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on behalf of the consumer. There are robot vacuum cleaners like iRobot which can do the cleaning for its owner. There are digital assistants such as Alexa or Siri that wait to hear their names to satisfy their owners' requests changing from learning today's weather to making a restaurant reservation. Also, AI-enabled self-driving cars is just around the corner. As can be seen from all these examples, AI is in the middle of consumers' life both with the companies' marketing activities and the products or services consumers directly use. Market growth rates also tell us that AI will penetrate more into the consumers' life in the near future (Bughin et al., 2017).

At this point, questions about the state of consumer-AI interaction comes to mind. What does AI mean to consumers, does it satisfy consumers to be served by an AI agent instead of a human, what sort of experiences and relationships do consumers have with AI, in which situations do consumers resist AI and what are consumers' concerns about AI? The answers to these questions are critical for companies. Because the implementation of AI in marketing has changed the way companies interact with their consumers and offered companies many benefits. For instance, with the help of AI technologies, companies can manage consumer data more efficiently and better understand their consumers and their shopping patterns, which can positively affect consumer satisfaction (Ameen et al., 2020; Evans, 2019). But AI system investments that are not wanted and accepted by consumers can create problems such as lower consumer satisfaction, negative consumer perception and behavior. Understanding how consumers perceive AI, the types of relationships they have with AI and their concerns toward AI will help companies design right AI-enabled products and services, take precautions for consumer concerns and reach their target customers with the right marketing communication strategies. Thus, the main aim of this chapter is to shed light on the consumer-AI interaction in the marketplace. By this aim, we reviewed the previous literature examining AI from a consumer behavior perspective and compiled the findings in a meaningful flow under this chapter.

This chapter could be beneficial for different parties such as practitioners, researchers, and students. We hope the practitioners can use this chapter to understand the consumers' perception of AI better and use these findings to design their AI technologies better. The researchers can see the previous research, detect the gaps in the literature, and design future research questions. Also, the students can learn the dynamics of AI in businesses and consumer behavior.

The chapter begins with introducing AI and its foundations and examining the usages of AI in marketing by giving real-world examples from a variety of sectors. Then we focus on how AI has transformed the service encounter, how consumers interact, have experiences, build relationships with AI and consumers' attitudes toward AI. It is followed by the concerns both consumers, researchers, and critics have about AI. In the final part of the chapter, we offer a conclusion, based on the discussion of reviewed literature, and directions for future research.

What is Artificial Intelligence

Artificial Intelligence is about computer systems that mimic the intelligence of humans. So, the question is, what do we mean by mimicking human intelligence? We mean that these computer systems have the ability to perceive the world around them and take actions based on these perceptions (Overgoor et al., 2019) and perform typical human mind functions such as perception, cognition, and conversation (Longoni, Bonezzi & Morewedge, 2019). Visual perception, speech recognition, decision-making, memory, reasoning, problem-solving, and goal-oriented actions are some of the abilities of AI that position it close to human intelligence (Paschen et al., 2019; Rossi, 2018).

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